

REMARKS

The attached response includes a request to amend the drawings per the enclosed set and the above amendments to the specification to provide the clarifications requested by the examiner regarding the election of species and inconsistencies between the drawings and the specification. I believe that the attached amendments should place the application in condition for allowance.

The set of drawings as filed contained figures 1-12. The examiner rightly noted inconsistencies between the drawings and the specification (page 2). I therefore propose to amend the drawings by cancelling figures 2-3 and 5-6, and renumbering figures 4 and 7-12 as figures 2 and 3-8, respectively. Reference numerals are added to renumbered figures 2-3 and 6 per the marked up drawing copies.

The examiner's assumption regarding the election of species is basically correct. I confirm for the record that I meant to elect species F and thus the examination based on former figure 7, now figure 3 is in order. This figure was and is described as figure 3 in the specification.

Although I compulsorily elected this species for examination, I respectfully request the examiner to reconsider the remaining species as alternative embodiments. The invention as claimed lies in a dummy bullet having a removable base (185) attached to the rear of the dummy bullet casing (187) to retain the primer (37) therebetween. That is the primer is snugly trapped in a primer seat (35) formed between the casing body rear and the base. Figure 3 is one embodiment of this structure. Figure 2 discloses an alternative embodiment of this structure. Figures 1 and 5-8 disclose further alternative embodiments of this basic structure.

The closest prior art known to me is the Jett reference which also discloses a dummy bullet (12, 47). However, in this reference the primer is directly pressed into the opening in the base endface of the cartridge insert (col. 4, lines 6-13). See also figures 2 and 6. Too much pressure to seat the primer can be dangerous. However, in Jett the primer must fit very snugly in the base opening if it is to stay in place during handling. Burnt primer remains accumulating in the primer seat make the reloading operation even more hazardous.

This is avoided in my invention by the provision of the screw-on base (27) which simply traps the primer without pressing it in the seat (35). Thus the primer is not subject to stresses during loading.

Furthermore, as I bring out in the amended claim, my casing base (27) partly covers the back of the primer (except for the base orifice 33 through which the firing pin impinges). This feature provides additional protection against the accidental firing in case the

dummy is dropped. In Jett, the rear face of the primer is exposed which may cause a loaded pellet to be fired if the primer accidentally detonates.

Moreover, an unspent primer in case of misfiring is both difficult and hazardous to remove in Jett, since the pellet will block access through the nose, whereas in my invention a defective primer may be removed simply by unscrewing the base off.

Good gun aim is important in indoor shooting practice. Thus in addition to providing different ways of trapping the primer without the dangers of the prior art, the present invention provides different means to insure that a fired pellet (43) maintains a straight trajectory after exiting the gun barrel end. In figures 2-3 pistol precision is enhanced by the provision of muzzle-loaded liner tubes (83, 183) having rifling grooves. Figure 4 discloses an alternative embodiment of a liner tube for a revolver. In the pistol/rifle embodiment of figure 1 no muzzle liner is used since rifling grooves (17) are provided in the casing bore (15). The liner is thus a further aspect of the main invention.

In the embodiments of figures 5-8, shooting precision is enhanced by maintaining or increasing the dummy-bullet length regardless of the type of revolver cylinder. Another aspect of my invention is related to revolvers of the same calibre having different barrel lengths according to different models and manufacturers. Within the essence of the main invention I provide a dummy bullet (187) / barrel liner tube (183') "combo" of a universal adjustable size for a given calibre, wherein the dummy-bullet length is sized to the shorter cylinder but may be used in a revolver having a longer cylinder. Several automatic (figures 5-6) and manual (figures 7-8) adjustability embodiments are disclosed.

Therefore, please reverse the withdrawal of claims 10 and 12-17 from consideration.

As outlined hereinabove, Jett appears to be the closest prior art. Since the examiner has considered this reference, a separate disclosure statement appears to be unnecessary.

Claim Rejections - 35 USC §112:

Claims 1 and 11 are amended to overcome the insufficient antecedent basis objection. Claim 3 is amended according to what is believed to be the examiner's reason for objection.

Claim 6 is amended to overcome the examiner's vagueness objection. The amendment to claim 6 is supported by the specification, page 11, lines 14-17. I propose to insert a dimension "L" in figure 3 to indicate the length of the dummy bullet 187.

Claim Rejections - 35 USC §102:

The examiner has considered claims 1-3, 5 and 7 anticipated by Lee. This is respectfully traversed hereunder.

Lee discloses a breech plug for shotguns (col. 2, lines 28-22). Except for a vague reference to antique firearms (col. 1, lines 7-9), there is no suggestion of application in an-

other type of firearm, let alone of the type used in the present invention, i.e. pistol, rifle or revolver. The firearms for which my invention is useful are suitable for target practice, unlike shotguns (and primitive firearms).

Lee is not concerned with indoor shooting practice but with muzzle loading shotgun conversions. The reference to specific reasons to do with hunting laws and use of black powder (col. 1, lines 9-22) teaches further away from my invention.

Thus both the field of endeavour and the motivations of my invention are quite unlike. In order to move further away from this reference, I have included the limitations that the gun has a "rifled barrel" and is "suitable for target practice" in amended claim 1.

Notwithstanding this, there are also structural/functional differences between the adaptor of claim 1 and Lee's plug. The base 21 in Lee is removable not to load or reload a primer inside the plug (casing) having the shape as in my invention but to convert from using a shotgun primer 25 (fig. 4), like model 209 for instance (base 21 screwed on) to a percussion cap 35 used in muzzle loading guns and required by certain states for hunting in the muzzle loading season (base 21 replaced by nipple 33 - fig. 6). Hence the removable base in Lee is for exchanging systems rather than retaining (trapping) a primer.

Orifice 17 is not for placing a pellet as in my invention but is an initiating chamber which is filled with gunpowder. Moreover, Lee's plugged shotguns fires standard ammunition, not a reduced calibre from the gun standard which is one of the moving principles of my invention.

Therefore I believe claim 1 is patentably novel and unobvious over Lee.

Regarding claim 3, my conical portion defines the rearwardly-tapering cavity for seating the primer. The conical shape is for properly trapping the primer given the standard shape of the latter. In Lee, the rearward-tapering surface 34 is for slipping on the percussion cap..

Claim Rejections - 35 USC §103:

The examiner has further cited the Chapin reference against claims 8, 9 and 11. This is respectfully traversed hereunder.

Chapin also discloses a shotgun conversion plug. It is a variation of Lee's plug. Therefore the same traverse as in Lee hereinabove applies.

My claims refer to a barrel liner, which is distinct from a breech plug such as in Chapin. Moreover, in my invention, the o-ring 199 is used for centring and spacing the liner to protect the muzzle inside surface, specially the barrel rifling grooves. Chapin provides an o-ring 32 to avoid the detonation gasses from expanding backwards (into the face of a shooter).

Allowable subject matter:

The examiner indicated that claim 4 would be allowable if rewritten in independent form as submitted with my new claim 21. Thus claim 21 would be allowable independently of the result of the above traverse.

Specification support for new claims 18-20 may be found in page 9, lines 1-2, page 12, lines 4, and figure 3, reference number 193, respectively.

As this response is mailed within the three-month term set down in the office action, I believe no fee is due.

Respectfully requested,

Juan C. Di Pietro
Inventor

Date: 21 May, 2003

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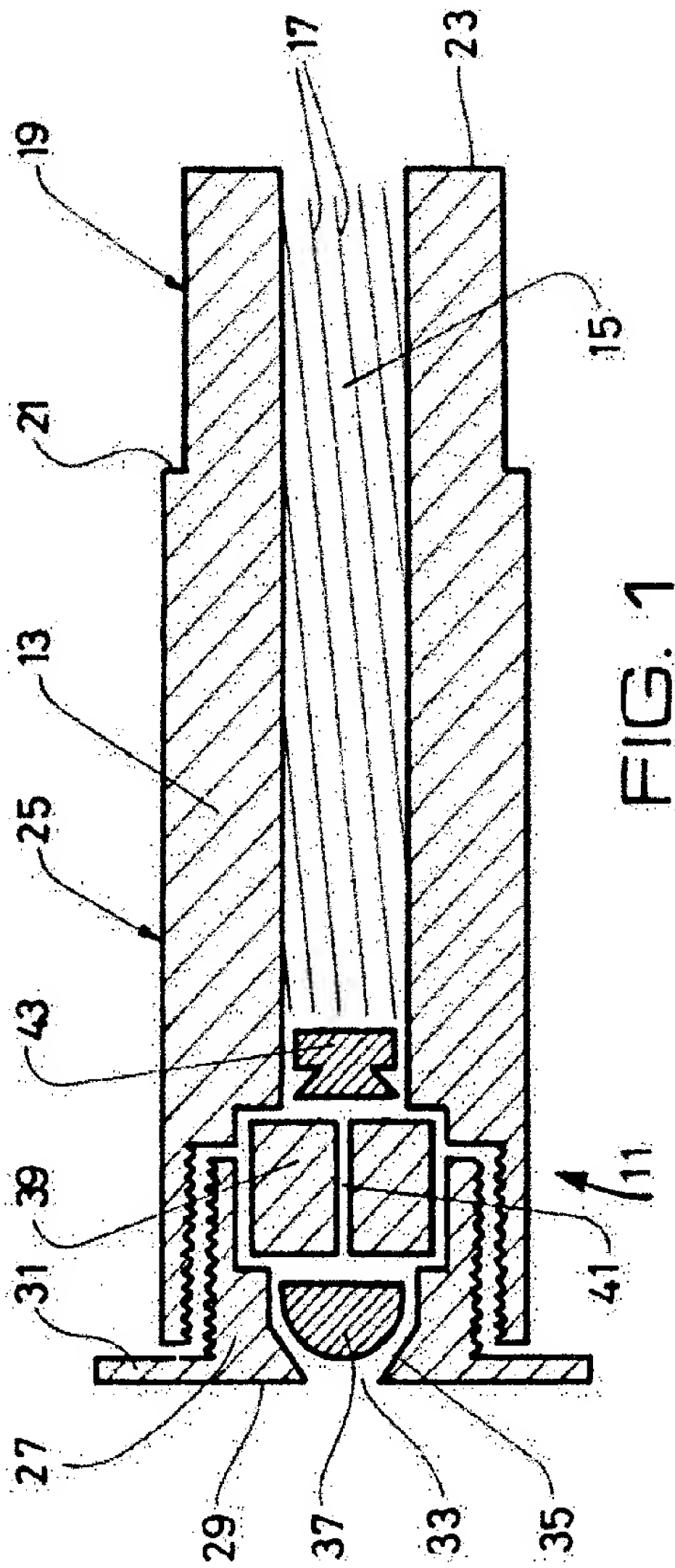


FIG. 1

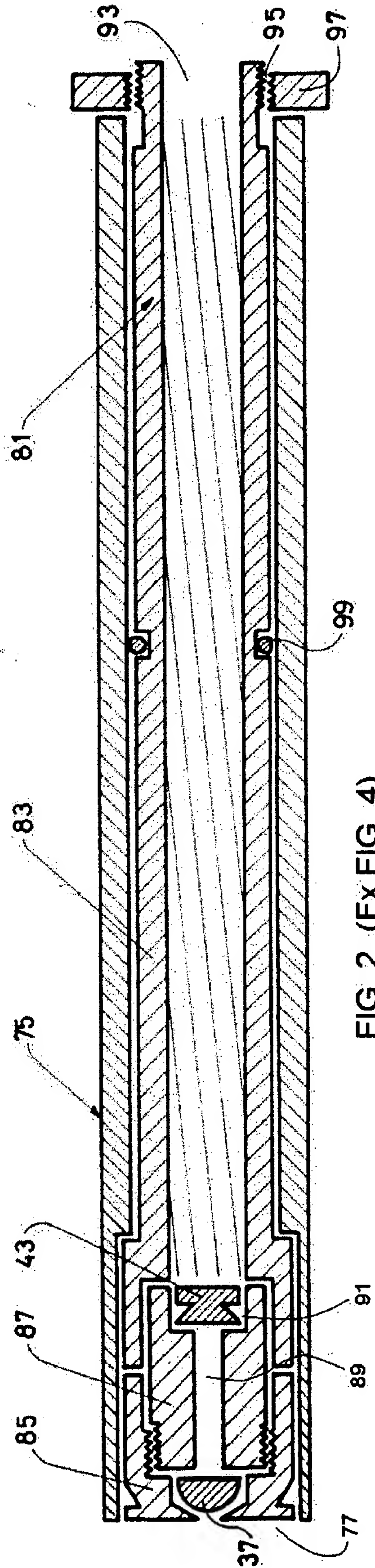
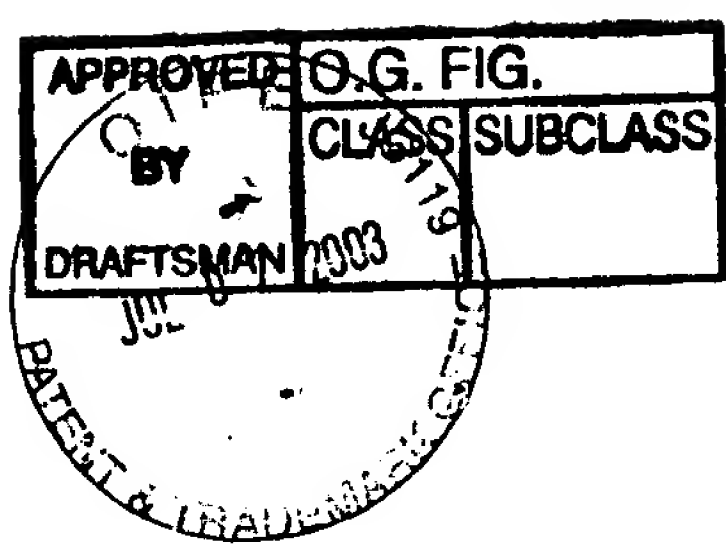


FIG. 2 (EX FIG. 4)



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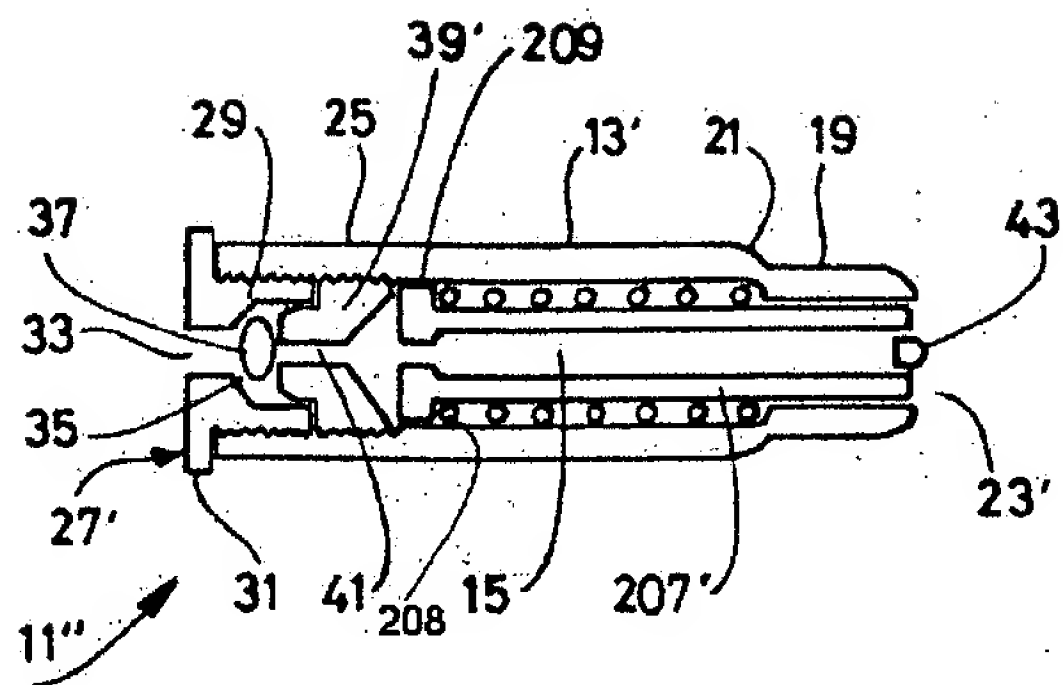


FIG. 6 (Ex FIG. 10)

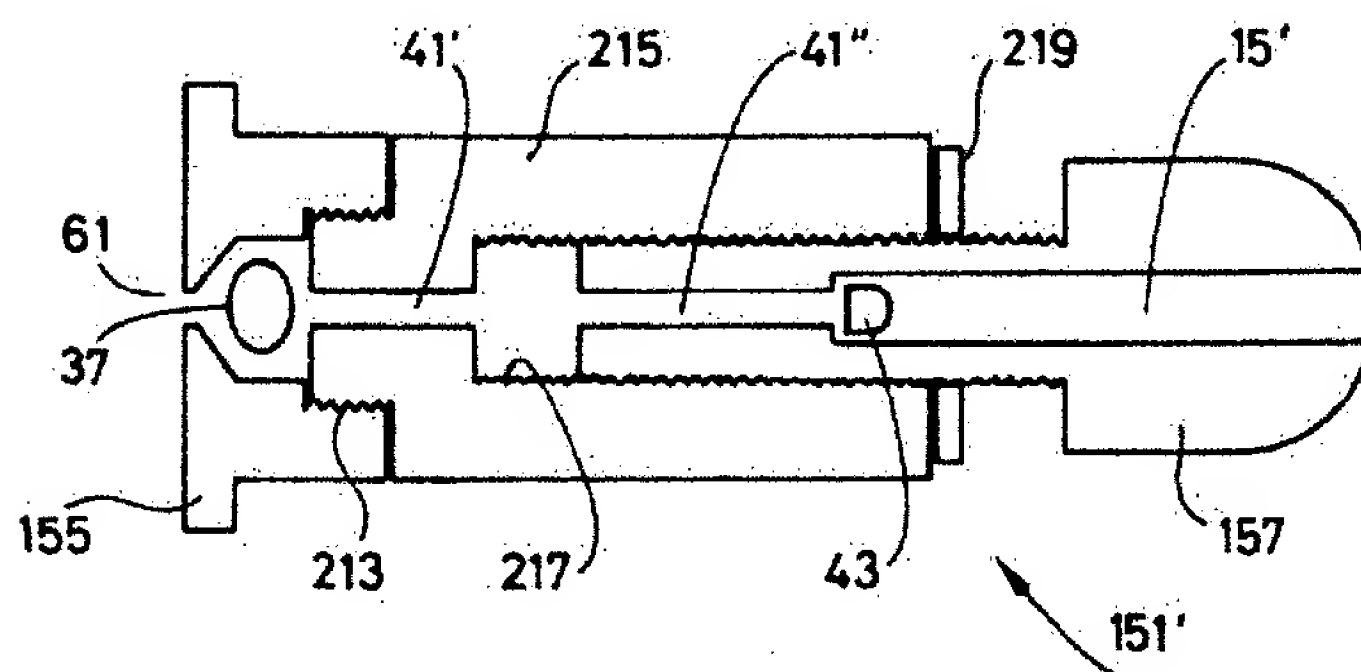


FIG. 7 (Ex FIG. 11)

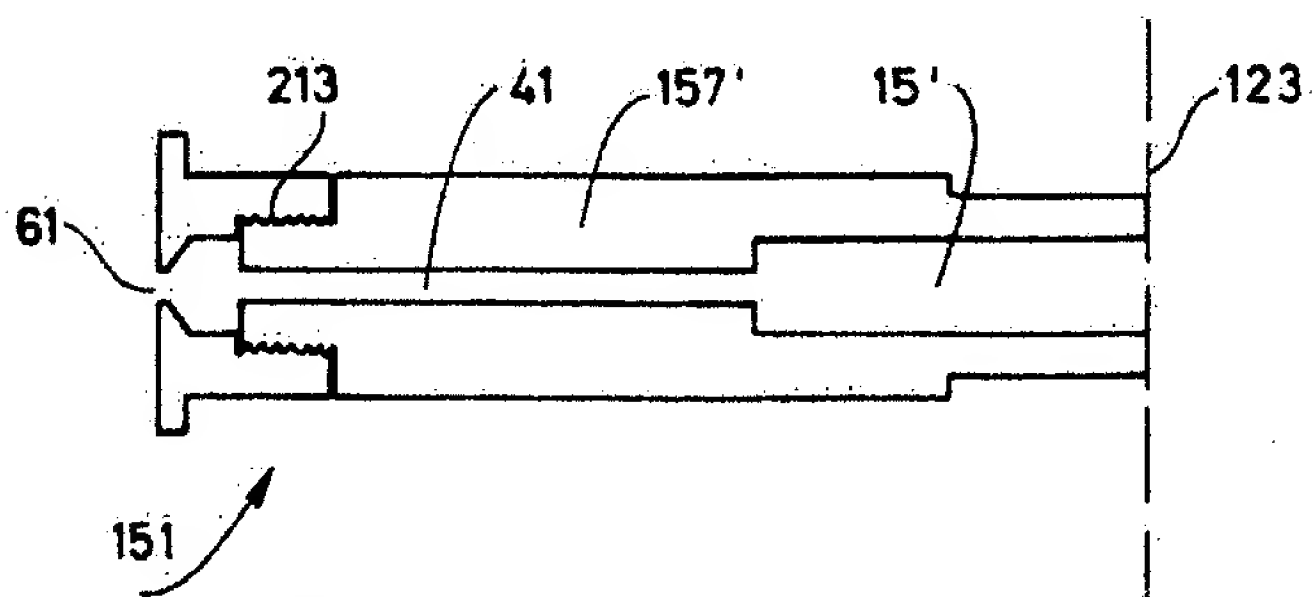


FIG. 8 (Ex FIG. 12)

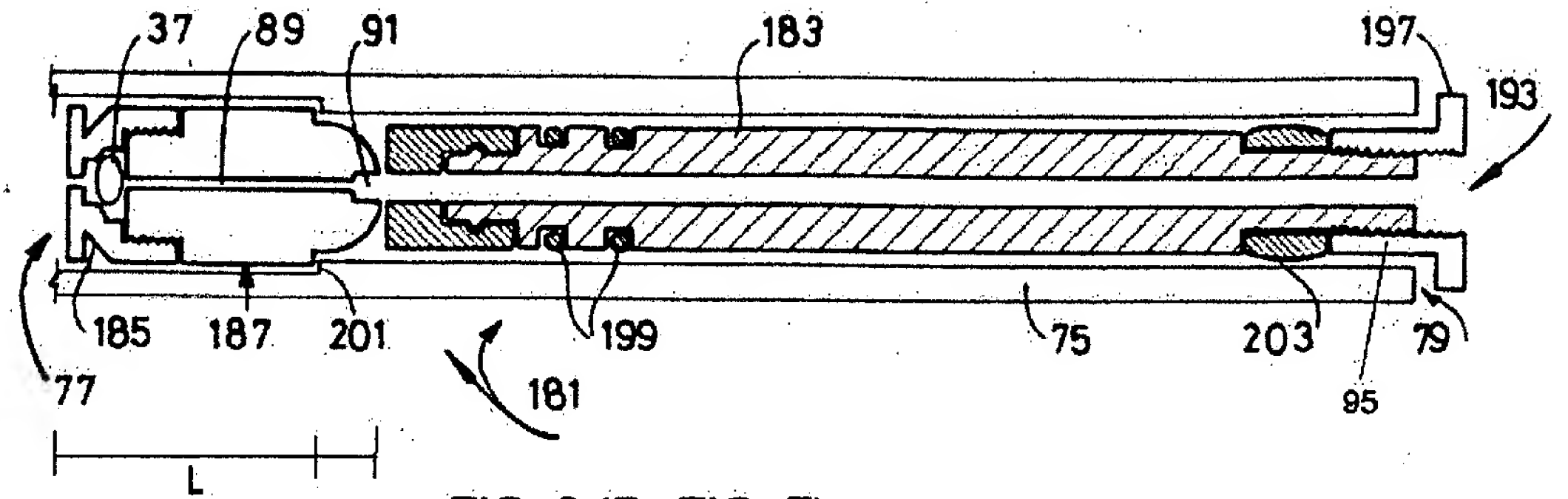
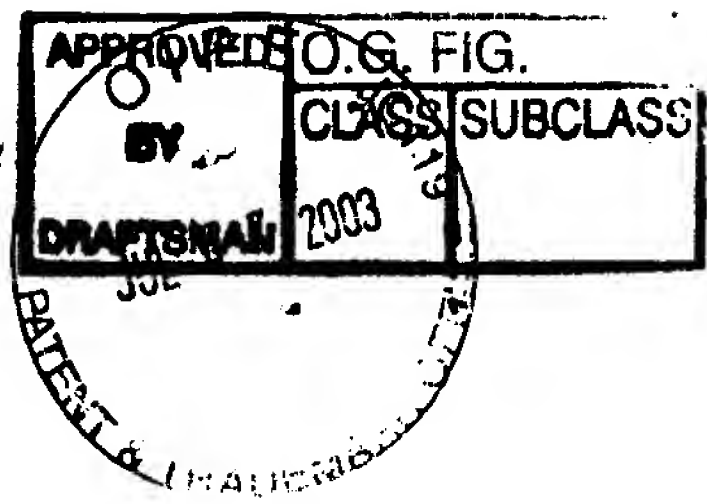


FIG. 3 (Ex FIG. 7)

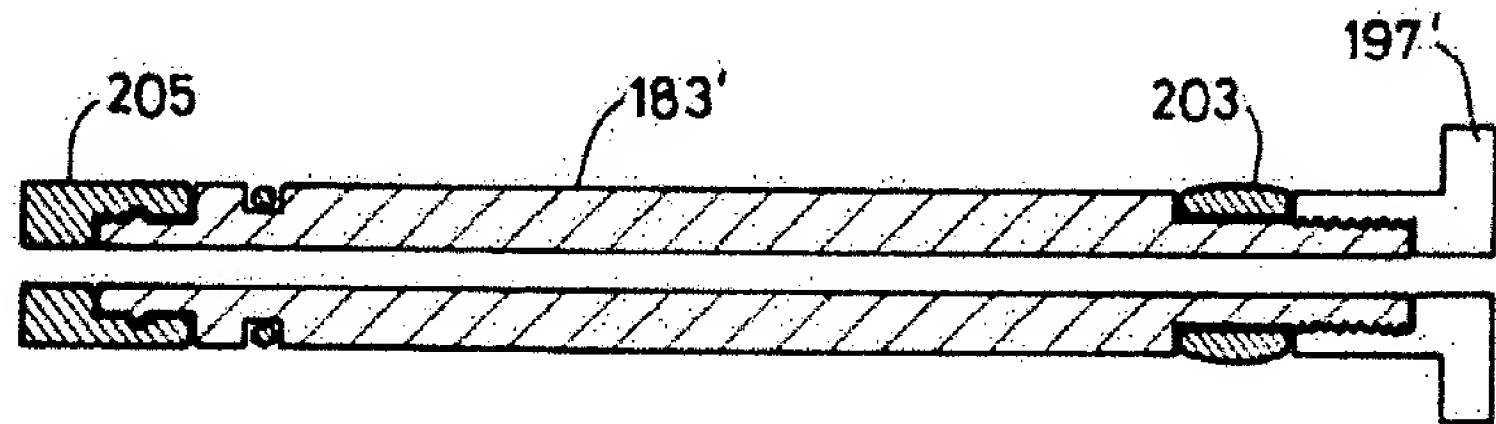


FIG. 4 (Ex FIG. 8)

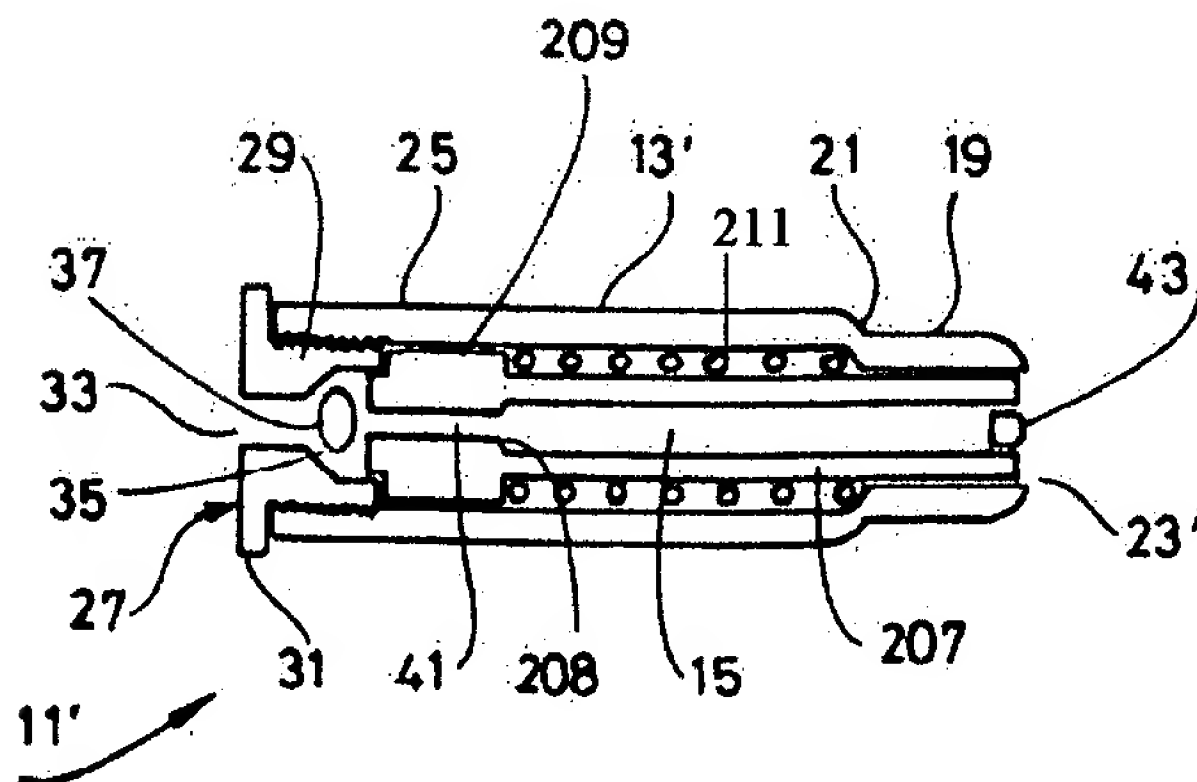
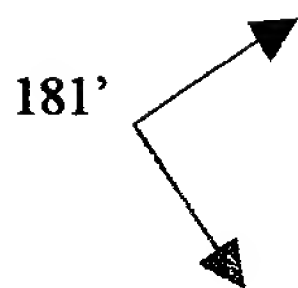


FIG. 5 (Ex FIG. 9)